

necessary accuracy in the part) the location is not accurate, as the work is clamped against a small area on one side of the hole and the point of the set-screw on the other. This can be avoided by locating the part against V-blocks, as shown in Fig. 29, which locate each shank central, irrespective of the variations in their diameters. The construction of this jig illustrates the points which have been referred to. The V-blocks provide four lines of contact, and the part is secured very rigidly in a central position irrespective of the variations in the diameter of the locating part. This jig, though more expensive than the one shown in Fig. 28, is quite simple in its construction. A central slot is machined to a width which need not be to any particular dimension as the steel V-blocks will be accurately fitted to this slot. Steel plates are secured to the ends of the

**Fig. 30. The Way the V-blocks for the Jig, Fig. 29, are planed**

jig after machining the slot as shown. By closing these ends after the slot is machined, the tool has a clear passage through, which, of course, would be impossible were the ends cast on. The V-blocks are planed in one piece, as shown in Fig. 30. The only important dimension is the width of the block. The exact position of the V in relation to the sides is immaterial provided that after

the blocks have been sawed off they are inserted in the slot in the jig with the long or short sides together. To avoid trouble from this source, one side of the slot and a corresponding side on the blocks should be marked to insure the correct insertion of the latter. In the event of a design requiring the V's to be strictly central with the sides, the cost would, of course, be increased, as much more care would be required in machining. The jig shown in Fig. 29 is for holding three of the pieces shown in Fig. 27 at one time; this number could be increased as desired.